

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A hydrodynamic and hydrostatic hybrid bearing comprises:

a housing containing a lubricant;

a bushing placed in the housing having a plurality of dynamic pressure generating ~~grooves~~ openings that penetrate completely through the bushing ~~for~~, said bushing storing the lubricant; and

a shaft rotatably installed in the bushing;

wherein the lubricant produces hydrodynamic pressure between the ~~grooves~~ openings and the shaft when the shaft rotates relative to the bushing.

2. (Previously Presented) The hydrodynamic and hydrostatic hybrid bearing of claim 1, wherein the housing comprises a porous material for storing a lubricant.

3. (Currently Amended) The hydrodynamic and hydrostatic hybrid bearing of claim 1, wherein a pre-pressure is applied to the housing for making the lubricant pass through the ~~grooves~~ openings and to be present between the bushing and the shaft.

4. (Previously Presented) The hydrodynamic and hydrostatic hybrid bearing of claim 3, wherein the housing further comprises a sealed unit to maintain the pre-pressure.

5. (Previously Presented) The hydrodynamic and hydrostatic hybrid bearing of claim 4, wherein the sealed unit comprises a sealing glue.

6. (Previously Presented) The hydrodynamic and hydrostatic hybrid bearing of claim 1, wherein the bushing is a cylinder-shaped bushing.

7. (Currently Amended) The hydrodynamic and hydrostatic hybrid bearing of claim 1, wherein the dynamic pressure generating grooves openings are two pairs of herringbone grooves.

8. (Withdrawn - Currently Amended) The manufacturing method of the hydrodynamic and hydrostatic hybrid bearing comprises the following steps:

forming a bushing;

processing a plurality of dynamic pressure generating grooves openings that completely penetrate through the bushing;

integrating the bushing into a housing containing a lubricant;

installing a shaft in the bushing; and

applying a pre-pressure to the housing and sealing the housing.

9. (Withdrawn) The manufacturing method as claim 8, wherein the bushing is a cylinder-shaped bushing.

10. (Withdrawn - Currently Amended) The manufacturing method as claim 8, wherein the dynamic pressure generating ~~grooves~~ openings are processed by a cutting processing.

11. (Withdrawn - Currently Amended) The manufacturing method as claim 8, wherein the dynamic pressure generating ~~grooves~~ openings are formed by an etching process.

12. (Withdrawn - Currently Amended) The manufacturing method as claim 8, wherein the dynamic pressure generating ~~grooves~~ openings are formed by a plastic injection process.

13. (Withdrawn - Currently Amended) The manufacturing method as claim 8, wherein the dynamic pressure generating ~~grooves~~ openings comprise two pairs of herringbone grooves.

14. (Withdrawn - Currently Amended) The manufacturing method as claim 8, wherein lubricant produces a hydrodynamic pressure

between the dynamic pressure generating ~~grooves~~ openings and the shaft when the shaft rotates relative to the bushing.

15. (Withdrawn) The manufacturing method as claim 8, wherein the housing contains porous material for storing the lubricant.

16. (Withdrawn - Currently Amended) The manufacturing method as claim 8, wherein the pre-pressure makes the lubricant pass through the ~~grooves~~ openings and be maintained between the bushing and shaft.

17. (Withdrawn - Previously Presented) The manufacturing method as claim 8, wherein the bushing is combined with the housing by being inserted directly into the housing.

18. (Withdrawn - Previously Presented) The manufacturing method as claim 8, wherein the bushing is combined with the housing by extruding and sintering.

19. (Previously Presented) The hydrodynamic and hydrostatic hybrid bearing of claim 3, wherein the pre-pressure is applied by an external device after the shaft is in the bushing.

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